§ 184.1945

- (1) The ingredient is used in food as a nutrient supplement as defined in 170.3(o)(20) of this chapter.
- (2) The ingredient is used in foods at levels not to exceed current good manufacturing practice. Vitamin A may be used in infant formula in accordance with section 412(g) of the Federal Food, Drug, and Cosmetic Act (the act) or with regulations promulgated under section 412(a)(2) of the Act.
- (d) Prior sanctions for this ingredient different from the uses established in this section do not exist or have been waived.

[48 FR 51610, Nov. 10, 1983]

$\S 184.1945$ Vitamin B_{12} .

- (a) Vitamin B₁₂, also known as cyanocobalamin ($C_{63}H_{88}CoN_{14}O_{14}P$, CAS Reg. No. 68-0919-099), is produced commercially from cultures of Streptomyces ariseus.
- (b) The ingredient meets the specifications of the Food Chemicals Codex, 3d Ed. (1981), p. 343, which is incorporated by reference. Copies are available from the National Academy Press, 2101 Constitution Ave. NW., Washington, DC 20418, or available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or to: http://www.archives.gov/ federal register/ code of federal regulations/

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- (c) In accordance with §184.1(b)(1), the ingredient is used in food with no limitation other than current good manufacturing practice. The affirmation of this ingredient as generally recognized as safe (GRAS) as a direct human food ingredient is based upon the following current good manufacturing practice conditions of use:
- (1) The ingredient is used as a nutrient supplement as defined 170.3(o)(20) of this chapter.
- (2) The ingredient is used in food at levels not to exceed current good manufacturing practice. Vitamin B₁₂ also may be used in infant formula in accordance with section 412(g) of the Federal Food, Drug, and Cosmetic Act (the act) or with regulations promulgated under section 412(a)(2) of the act.

(d) Prior sanctions for this ingredient different from the uses established in this section do not exist or have been waived.

[50 FR 6341, Feb. 15, 1985]

§ 184.1950 Vitamin D.

- (a) Vitamin D is added to food as the following food ingredients:
- (1) Crystalline vitamin D₂ (C₂₈H₄₄O, CAS Reg. No. 50-14-6), also known as ergocalciferol, is the chemical 9.10seco(5Z,7E,22E)-5,7,10(19),22-
- ergostatetraen-3-ol. The ingredient is produced by ultraviolet irradiation of ergosterol isolated from yeast and related fungi and is purified by crystallization.
- (2) Crystalline vitamin D₃ (C₂₇H₄₄O, CAS Reg. No. 67-97-0), also known as cholecalciferol, is the chemical 9,10seco(5Z,7E,)-5,7,10(19)-cholestatrien-3ol. Vitamin D₃ occurs in, and is isolated from, fish liver oils. It is also manufactured by ultraviolet irradiation of 7-dehydrocholesterol produced from cholesterol. It is purified by crystallization. Vitamin D₃ is the vitamin D form that is produced endogenously in humans through sunlight activation of 7-dehydrocholesterol in the skin.
- (3) Vitamin D₂ resin and vitamin D₃ resin are the concentrated forms of irradiated ergosterol (D2) and irradiated 7-dehydrocholesterol (D₃) that are separated from the reacting materials in paragraphs (a) (1) and (2) of this section. The resulting products are sold as food sources of vitamin D without further purification.
- (b) Vitamin D₂ and vitamin D₃ as crystals meet the specifications of the Food Chemicals Codex, 3d Ed. (1981), pp. 344 and 345, which is incorporated by reference. Copies are available from the National Academy Press, 2101 Constitution Ave. NW., Washington, DC 20418, or available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http:// www.archives.gov/federal register/

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ibr locations.html. Vitamin D₂ resin and vitamin D₃ resin must be of a purity suitable for their intended use.

(c)(1) In accordance with §184.1(b)(2), the ingredients are used in food as the